

EXAMINING THE BLOGGING HABITS OF AGRICULTURAL LEADERSHIP
STUDENTS AT TEXAS A&M UNIVERSITY: UNDERSTANDING MOTIVATION,
USE, AND SELF-EFFICACY

A Thesis

by

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ABSTRACT

Blogging is a form of social media, and student engagement is at the center of blogging. The benefits of blogging include being easy to create and maintain, making writing easier to share, encouraging students to write outside of the classroom, and supporting group collaboration. The findings suggest students are more passive in their blogging experiences, as the data found students generally read blogs more than they wrote blogs. The Unified Theory on Acceptance and Use of Technology and self-efficacy theory were used as the framework for the study. This study sought to explore agricultural leadership students' motivations for blogging. Student responses indicated on average they read blogs less than once a month. Students typically reported a preference for informal writing even if they did not blog. Teacher training could be used to increase awareness among educators about the benefits of blogging. Educators must be able to convey the benefits of educational blogging in terms of its ease and benefit for student acceptance.

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NOMENCLATURE

UTAUT Unified Theory of Acceptance and Use of Technology

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1. INTRODUCTION

The Internet has emerged as a quickly growing means of communication for students, and social media is the main outlet for this interaction. The growth has afforded opportunities for the use of social media for educational purposes. Social media is a term used for a collection of Internet websites, services, and practices that support collaboration, community building, participation, and sharing (Junco & Chickering, 2010).

The primary social media networks, a major category of social media, include Twitter®, Facebook® and weblogs, or blogs, such as Wordpress® and Blogspot®. A blog is an online journal that allows people to share information, convey material and express their views (Brescia & Miller, 2006). The primary element that makes blogging “social” media is the comments. Without comments, blogging merely becomes just another news outlet. With comments, blogging becomes a conversation that connects the people who read the blog. Kirby and Kaillio (2007) liken blogs to unlocked diaries and found today’s teens are more open about posting their personal thoughts online.

Blogging has dropped among teens in recent years, down from 28% of online teens in 2006 to 14% as of 2010 (Lenhart, Purcell, Smith, & Zickuhr, 2010). In contrast, blogging has increased among older adults and remained steady among adults overall. Teens and young adults are also commenting on blogs less, even though both teen and adult use of social networking has risen significantly (Lenhart et al., 2010).

According to Andergassen, Behringer, Finlay, Gorra and Moore (2009), in “Weblogs in Higher Education – Why do Students (not) Blog?” students are driven to begin blogging by a general will to write, test the blogging technology and socialize with their peers. However, they either are unwilling to begin a blog, or cease to blog, because of concerns with a lack of privacy, a lack of immediate interaction and the perception that the service does not provide useful study information (Andergassen et al., 2009).

This study seeks to further explore the motivations for blogging, or the lack of blogging, of agricultural leadership students at Texas A&M University. The question of whether students are reading blogs, regardless of maintaining one, is also discussed, including the types of blogs students read and their level of activity therein.

All of these networks can become important tools in education through proper use. Blogging helps students become more comfortable with the digital world in order to better succeed in the twenty-first century workplace (Platt, 2011). Blogging also encourages students to reflect on their writing styles, and the public nature of blogging and the Internet results in students being more cautious and deliberate with their writing, as anything published is out in the blogosphere for anyone to read (Platt, 2011). Blogosphere is a term for all blogs and their interconnectivity, and implies that blogs exist as a connected community. This community is advantageous for students because students can engage with topics outside of the classroom setting (Platt, 2011).

Kirby and Kaillio (2007) liken blogs to diaries and wrote, “Diaries are no longer kept under lock and key. Today’s teens seem to prefer a more open approach to life. They have no qualms about posting their personal and private thoughts on the Internet.”

Blogs allow for self-direction within a public forum (Winer, 2003), but once published, remain open to public scrutiny. Luehmann and Tinelli (2008) found blogging, and specifically the comments of like-minded individuals, helped reform-minded science teachers nurture a community of support. Almost all participants responded that blogging was a valuable asset to their professional learning (Luehmann & Tinelli, 2008).

Brescia and Miller (2006) conducted a study to find instructional advantages of blogging in college settings. They wrote, “Findings suggested that the reinforcing of course engagement and the repetition of exposure to coursework are the most valuable aspects to blogging (Brescia & Miller, 2006).” They found blogging affords students the opportunity to reflect on what they are learning and share personal views or opinions. Brescia and Miller (2006) surveyed a panel of blogging experts in an attempt to identify the elements that make blogging an effective tool. The element that received the greatest positive response was, “Weblogging has its greatest instructional potential for those who maintain a weblog throughout their college careers, using it as a knowledge log and personal content management system” (Brescia & Miller, 2006, p. 47).

Ferdig and Trammell (2004) found that blogging has four distinct advantages for learners. The use of blogs helps students become experts in a particular subject, gives students the chance to legitimately participate, increases student interest and ownership in learning and provides opportunities for the sharing of diverse perspectives.

In “Civil Discourse in the Age of Social Media,” Junco and Chickering (2010) found online communication, if used in responsible and educationally relevant ways, can benefit both learning and development. This was due in large part to the increased

student engagement that resulted from social media use, such as a controlled study that found using Twitter in educationally relevant ways in a first-year seminar increased both student involvement in the class and grades (Junco & Chickering, 2010). However, there are a number of things that higher education professionals must understand before utilizing social media in education (Junco & Chickering, 2010). Further, they found that a well-thought-out online policy is critical to fostering a healthy educational environment online for students. Basic elements of this policy include: “Emphasize the importance of respect and civility,” “Spell out expected positive behaviors and sanctions for negative actions,” “Recognize the educational value of open sharing and examination of diverse views,” and “Emphasize the critical need for valid information, solid evidence, and explicit information about sources” (Junco & Chickering, 2010), p.16). These guidelines are just as important when blogging as with other forms of social media. Student bloggers have to be conscious of the fact that their material is going out on a public forum, and that blogging is intended as a dialogue.

Student engagement is at the heart of educational blogging. Astin (1984) defined engagement as “the amount of physical and psychological energy that the student devotes to the academic experience” (p. 297). Kuh (2009) suggested out-of-class engagement in educationally relevant activities is important to student success, and positively related to a number of desired outcomes of a college education. In “The Relationship between Frequency of Facebook Use, Participation in Facebook Activities, and Student Engagement,” Junco (2011) found commenting on Facebook was one of the positive predictors of college outcomes. Comments make up a large part of the

blogosphere; however, the two social networks may not be similar enough to generalize that conclusion.

Barrett (2006) wrote “The social networking sites that now seem to be most successful (in terms of large memberships) are those that have been created around a central theme and maintain a sort of voyeuristic appeal.” Blogs are created around many different themes, which set them apart from other social networking sites with much more general purposes.

Arnold and Paulus (2010) conducted a case study wherein eight students used Ning, a social networking site, for experiential learning. The study combined instructor and student perceptions of the site. Student perceptions of the site were captured by three themes: community building, modeling and feedback, and authenticity (Arnold & Paulus, 2010). The study found that the students read each other’s work more than usual, to get ideas on how to approach an assignment. One of the students said the feedback provided by the students was more critical and well thought out than criticism in class would have been (Arnold & Paulus, 2010).

In a study examining the effectiveness of using blogs to teach students writing skills, Boas (2011) outlines steps in the writing process students can take before publishing a blog, including brainstorming, pre-writing, feedback and revision. He indicated blogging is an effective way to encourage writing, and the process approach to writing reflects the fact that blogging is a relationship between the writer and his or her audience (Boas, 2011). He found further that student-centered teaching that makes learning relevant to students results in greater involvement (Boas, 2011). Carnevale

(1988) found that writing and other communication skills are essential in the workplace, and one of the skills employers are looking for, which makes developing students' writing skills essential to universities' success.

According to Ferris and Hedgcock (2005), "writing represents a process that must be undertaken with the reader's background knowledge, needs, interests and ideologies in mind" (p. 8). The specificity of blog topics enables writers to be aware of this information. Other benefits of blogging with regard to the writing process include that they are easy to create and maintain, make writing easier to share, encourage students to write outside of the classroom, and support group work and collaboration (Bloch, 2008).

Junco, Heibergert and Loken (2010) examined the effect of Twitter on college student engagement and grades by assigning non-Twitter users to either be part of a class that used Twitter or not. In the experimental group, Twitter was used as class communication, discussion, reminders and support for students (Junco et al., 2010). The average number of student tweets during the semester was 48.20, while the facilitator's account sent out 301 tweets (Junco et al., 2010). The results of the study suggest "that Twitter can be used to engage students in ways that are important to academic and psychosocial development" (Junco et al., 2010).

In a study to assess agricultural communications students' and instructors' perceptions of social media for educational purposes, Settle et al. (2012) found that prior association with social media in an educational setting led to more positive perceptions of social media within education. The relationship was stronger for instructors than

students, however (Settle et al., 2012). Settle et al. (2012) suggested that factors relating to distance education could be analogous to social media because “both involve the adoption of new technology to facilitate the learning process” (p. 139).

In the study, 62.1% of instructors who responded reported that they had used social media in the coursework, with 22% using a blog. Also, 70.1% of students surveyed had used social media for a course, with 18.4% using a blog. Settle et al. (2012) also found the following in regard to communication and productivity levels associated with social media in the classroom:

Students and instructors were split on the expectations for student productivity and quality of communication, though scores for both criteria were relatively neutral. Students expected an increase in the quality of communication ($M = 3.06$) and a decrease in student productivity ($M = 2.85$). Instructors, conversely, expected an increase in student productivity ($M = 3.12$) and a decrease in the quality of communication ($M = 2.90$). (p. 142)

With regard to the correlation between prior social media use and users’ perception of social media, all relationships between specific social media sites were statistically significant (Settle et al., 2012). Information to be taken from the study includes that instructors should be aware when teaching with social media that students’ opinions on social media’s effectiveness could differ from their own (Settle et al., 2012).

All of the various social media types were reported by students as unimportant for future careers (Settle et al., 2012). Within this study, however, students with prior use of social media in the classroom had both higher perception of social media’s

importance for future careers and higher interest in social media use for instructional purposes (Settle et al., 2012). Another study by Settle et al. (2011) found that participants believed that, at the least, it was probably important that students know how to use online forums, video-sharing sites and blogs for future careers, with micro-blogs and social networking sites other than Facebook seen as the least important.

Discussion forums and online chats can be used in traditional and online classrooms as a way for students to interact and discuss components of the course (Blackmon, 2012). The importance of assigning roles to students is a difference between discussion forums and blogs, as well as the tendency for one student or faculty member to moderate the discussion (Blackmon, 2012). However, depending on the way it is administered, a discussion forum could take on characteristics of blogging.

A study by Rhoades, Friedel and Irani (2008) about students' feelings on new technology as it is used in education found students are using social networking sites and blogging minimally inside the classroom. Many students see these as social tools only and may not enjoy social media in education (Rhoades et al., 2008). Further, students are reluctant to interact with faculty on social media such as Facebook, due to its public nature (Lipka, 2007). Blogging isn't typically included in the social media students see as purely for entertainment, however, unlike Twitter and Facebook (Rhoades et al., 2008), and could therefore be used as an alternative educational tool that would still provide many of the same benefits using Twitter and Facebook does.

Instructors should become familiar with new technologies, and evaluate the potential advantages and disadvantages of their use in the classroom (Rhoades et al.,

2008). It is important to integrate these technologies effectively, as improper use can have consequences on students' perceived benefits of social media, and to keep in mind which tools are perceived primarily for entertainment use versus informational tools in students' minds (Rhoades et al., 2008).

2. THEORETICAL FRAMEWORK

The Unified Theory of Acceptance and Use of Technology (UTAUT) was developed by Venkatesh, Morris, Davis and Davis (2003). The model is a combination of eight different models of technology acceptance. The UTAUT has four core determinants, which consist of performance expectancy, effort expectancy, social influence and facilitating conditions. These are factored in with gender, age, experience and voluntariness of use to identify behavioral intention (Venkatesh et al., 2003). A longitudinal study found that this model is able to explain approximately 70% of users' acceptance of the technology, compared with the other models that were able to explain 40% (Venkatesh et al., 2003).

Pardemean and Susanto (2012) found blogs have the potential to become a useful learning tool. In the study, students were able to access and review previous materials, and then discuss them with others in the course, which would then improve both their critical thinking and writing skills (Pardemean & Susanto, 2012). The study employed three of the variables from the UTAUT model to determine behavioral intention and its relationship with actual usage of blogs to learn e-business course materials (Pardemean & Susanto, 2012). The three variables used were performance expectancy, effort expectancy and social influence.

A majority of the students spent less than one hour each week using the blog and had less than one-year of prior blog experience (Pardemean & Susanto, 2012). The study found that performance expectancy and social influence were significantly related to

behavioral intention but effort expectancy was not, and that behavioral intention was not significantly related to actual use of the blog (Pardemean & Susanto, 2012).

A study by Avci and Askar (2012) compared blog and wiki use as constructive classroom tools with respect to perceived usefulness, perceived ease of use, intention, self-efficacy and anxiety. The study used the UTAUT model and found that wiki and blogs contribute positively to students' work in learning environments. Perceived usefulness and self-efficacy were the most effective variables in the study, explaining 71% of blog and wiki usage.

Bandura's (1993) self-efficacy theory revolves around four major processes, which include cognitive, affective, motivational and selectional. These processes contribute to students' self-efficacy, which in turn contributes to the utilization of skills (Bandura, 1993).

Yi and Hwang (2003) used Bandura's self-efficacy theory to predict the use of web-based information systems, and found that self-efficacy plays an important role in determining the actual use of technology. They found that self-efficacy, or a student's perception of their capabilities with regard to technology, was a better indicator of actual use than even behavioral intention (Yi & Hwang, 2003). DeTure (2004) found that self-efficacy was a poor predictor of performance, such that the confidence level of the student did not correlate with success of the task. However, the more specific the self-efficacy measure was to the task, the better it predicted the performance outcome (DeTure, 2004).

3. PURPOSE AND OBJECTIVES

This study sought to explore agricultural leadership students' motivations for blogging at Texas A&M University. More specifically, the objectives were to:

1. Describe students' level of effort expectancy with blogging;
2. Describe students' level of performance expectancy with blogging;
3. Describe students' level of behavioral intention with blogging;
4. Describe students' interest in writing as it relates to blogging;
5. Describe students' interest in reading blogs as it relates to blogging; and
6. Describe students' level of self-efficacy with blogging.

4. METHODS

The target population for the study of blogging habits of agricultural leadership students was undergraduate students at Texas A&M University majoring in agricultural leadership. This was a census study of one hundred fifty-three (N=153) students in three agricultural leadership courses at Texas A&M University; leading change, leading and training adults, and technology instructional design strategies. Courses used included both writing and non-writing components.

Data for the study were collected using a 29-item instrument, which included a revised version of Venkatesh et al.'s (2003) UTAUT scale, Tschannen-Moran and Hoy's (2001) Teacher Sense of Efficacy Scale, and demographic questions. The UTAUT focuses on determining performance expectancy, behavior expectancy, social influence and facilitating conditions. The variables focused on in this study were self-efficacy, perceived usefulness and perceived writing ability. Content validity of the combined instrument was assessed by distance learning researchers at Texas A&M University.

The UTAUT scale was developed by Venkatesh et al. (2003) to assess students' technological preferences, with regard to performance expectancy, effort expectancy and behavioral intention. Blogging preference was measured on a seven-point summated scale: 1 = *strongly disagree*, 2 = *moderately disagree*, 3 = *somewhat disagree*, 4 = *neutral (neither disagree nor agree)*, 5 = *somewhat agree*, 6 = *moderately agree*, and 7 = *strongly agree* (Venkatesh et al., 2003). Constructs of the UTAUT were calculated *ex post facto*. Performance expectancy earned a reliability coefficient of .82, effort

expectancy = .86, and behavioral intention = .90 in this study. The reading construct had a reliability coefficient of .67 and the writing of .61 in this study. The internal consistency for the constructs of self-efficacy, self-directed learning, performance expectancy, effort expectancy, and behavioral intention were judged as acceptable for use in answering the study's research objectives (Cronbach, 1951).

A modified version of Tschannen-Moran and Hoy's (2001) Teacher Sense of Efficacy Scale was used to assess the self-efficacy aspect of students' usage of blogging. The Teacher Sense of Efficacy Scale was created using Bandura's (1993) self-efficacy theory (Tschannen-Moran & Hoy, 2001). The instrument used a nine-point summated scale for each item with anchors: 1 = *nothing*, 3 = *very little*, 5 = *some influence*, 7 = *quite a bit*, and 9 = *a great deal* (Tschannen-Moran & Hoy, 2001). The self-efficacy construct was assessed *ex post facto* for internal consistency and a reliability coefficient of .91 for self-efficacy was produced in this study.

Survey methodology was utilized to collect data from the sample. This sample was chosen for its randomness of students within the major at Texas A&M University because it was three different courses of varying sizes that were all populated by agricultural leadership students at various stages in their collegiate career. The researchers constructed a web-based questionnaire in Qualtrics™. The Tailored Design Method (Dillman, Smyth, & Christian, 2009) for creating and delivering an electronic questionnaire was employed for this study. The sample received an email notification and two days later received an email that included a link to the questionnaire in Qualtrics™. Two separate emails, both a week apart, were sent to non-respondents.

Seventy ($n = 70$) participants responded yielding a response rate of 45.75%. The researchers examined early and late respondents to assess nonresponse error from achieving less than an 85% response rate. There were no significant differences between early and late respondents and therefore, the results can be generalized (Lindner, Murphy, & Briers, 2001) to the population ($N = 153$). Data were analyzed by employing descriptive statistics. Franekel, Wallen, and Hyun (2012) indicated descriptive statistics provide researchers with numerical data that explains the independent variables in a study.

A significant relationship between self-efficacy and behavioral intention was found in the study. According to Davis (1971), there are tenets for formulating measures of the degree of association among variables: When X and Y are independent they should equal .00, a maximum of +1.00 exists for the strongest possible positive association, X and Y should have a maximum of -1.00 for the strongest possible negative correlation, and an intrinsic meaning should be present in the values. A value of $r = +.70$ or higher indicates a very strong association, $+.50$ to $+.69$ signifies a substantial positive association, $+.30$ to $+.49$ is a moderate positive association, $+.10$ to $+.29$ suggests a low positive association, $+.01$ to $+.09$ implies a negligible positive association, $.00$ means no association exists, $-.01$ to $-.09$ indicates a negligible negative association, $-.10$ to $-.29$ denotes a low negative association, $-.30$ to $-.49$ represents a moderate negative association, $-.50$ to $-.69$ suggests a substantial negative association, and $-.70$ or lower indicates a very strong negative association (Davis, 1971).

The study assessed four demographics of the survey participants. Out of 70 respondents, $n = 43$ (61.42%) were male. Thirty-nine ($n = 39$) students (55.71%) were seniors, 31 respondents ($n = 31$, 44.00%) had a GPA between 2.99 and 2.50, and 32 students ($n = 32$, 45.71%) were employed part-time. The findings are limited to the targeted population. However, the results provide agricultural leadership practitioners at Texas A&M University and researchers facets that contribute to students' acceptance and usage of blogging in courses.

5. FINDINGS

The first objective of the study was to describe students' level of effort expectancy with blogging (see Table 1). Kurtosis and skewness of the data were not an outcome as the data were normally distributed. Therefore, the descriptive statistics of the UTAUT and effort expectancy were presented versus data frequencies. The question, "Learning to operate blogs would be easy for me" earned the highest score ($M = 4.51$, $SD = 1.89$) of the effort expectancy construct in the UTAUT.

Table 1

Descriptive Statistics for the Effort Expectancy Construct through Blogging Habits of Undergraduate Agricultural Leadership Students in 2012 (N = 70)

| Statements | N | M | SD |
|---|----|------|------|
| Learning to operate blogs would be easy for me. | 70 | 4.51 | 1.89 |
| I would find blogs easy to use. | 70 | 4.47 | 1.77 |
| It would be easier for me to become skillful at blogging. | 70 | 4.14 | 1.94 |
| My interaction with blogging would be clear and understandable. | 70 | 3.99 | 1.95 |

Note. Overall $M = 4.28$, $SD = 1.89$. Scale: 7 = Strongly Agree, 6 = Moderately Agree, 5 = Somewhat Agree, 4 = Neutral (Neither Agree or Disagree), 3 = Somewhat Disagree, 2 = Moderately Disagree, 1 = Strongly Disagree.

The second objective of the study was to describe students' level of performance expectancy with blogging (see Table 2). Kurtosis and skewness of the data were not an outcome as the data were normally distributed. Therefore, the descriptive statistics of the

UTAUT and performance expectancy were presented versus data frequencies. The question, “I would find blogging useful in school” earned the highest score ($M = 3.79$, $SD = 1.80$) of the performance expectancy construct in the UTAUT.

Table 2

Descriptive Statistics for the Performance Expectancy Construct through Blogging Habits of Undergraduate Agricultural Leadership Students in 2012 (N = 70)

| Statements | N | M | SD |
|---|----|------|------|
| I would find blogging useful in school. | 70 | 3.79 | 1.80 |
| If I blog, I would increase my chances of getting a good grade. | 70 | 3.46 | 1.79 |
| Blogging would increase my productivity. | 70 | 3.30 | 1.64 |

Note. Overall $M = 3.52$ $SD = 1.74$. Scale: 7 = *Strongly Agree*, 6 = *Moderately Agree*, 5 = *Somewhat Agree*, 4 = *Neutral (Neither Agree or Disagree)*, 3 = *Somewhat Disagree*, 2 = *Moderately Disagree*, 1 = *Strongly Disagree*.

The third objective of the study was to describe students’ level of behavioral intention with blogging (see Table 3). Kurtosis and skewness of the data were not an outcome as the data were normally distributed. Therefore, the descriptive statistics of the UTAUT and behavioral intention were presented versus data frequencies. The question, “I like working with blogs” earned the highest score ($M = 3.23$, $SD = 1.86$) of the behavioral intention construct in the UTAUT.

Table 3

Descriptive Statistics for the Behavioral Intention Construct through Blogging Habits of Undergraduate Agricultural Leadership Students in 2012 (N = 70)

| Statements | N | M | SD |
|---|----|------|------|
| I like working with blogs. | 70 | 3.23 | 1.86 |
| I intend to blog in the next 12 months. | 70 | 2.94 | 1.98 |
| I predict I would blog in the next 12 months. | 70 | 2.91 | 2.09 |

Note. Overall $M = 3.03$, $SD = 1.98$. Scale: 7 = Strongly Agree, 6 = Moderately Agree, 5 = Somewhat Agree, 4 = Neutral (Neither Agree or Disagree), 3 = Somewhat Disagree, 2 = Moderately Disagree, 1 = Strongly Disagree.

The fourth objective of the study was to describe students' interest in writing as it relates to blogging (see Table 4). Kurtosis and skewness of the data were not an outcome as the data were normally distributed. Therefore, the descriptive statistics of the UTAUT and writing were presented versus data frequencies. The question, "I am good at writing" earned the highest score ($M = 4.91$, $SD = 1.81$) of the writing construct in the UTAUT.

Table 4

Descriptive Statistics for the Writing Construct through Blogging Habits of Undergraduate Agricultural Leadership Students in 2012 (N = 70)

| Statements | N | M | SD |
|---|----|------|------|
| I am good at writing. | 70 | 4.91 | 1.81 |
| My writing style is informal. | 70 | 4.73 | 1.62 |
| I enjoy writing. | 70 | 4.46 | 2.09 |
| My writing style is formal. | 70 | 4.17 | 1.65 |
| I write about topics related to school and class. | 70 | 3.84 | 1.92 |

Note. Overall $M = 4.42$, $SD = 1.82$. Scale: 7 = Strongly Agree, 6 = Moderately Agree, 5 = Somewhat Agree, 4 = Neutral (Neither Agree or Disagree), 3 = Somewhat Disagree, 2 = Moderately Disagree, 1 = Strongly Disagree.

The fifth objective of the study was to describe students' interest in reading blogs as it relates to blogging (see Table 5). Kurtosis and skewness of the data were not an outcome as the data was normally distributed. Therefore, the descriptive statistics of the UTAUT and writing were presented versus data frequencies. The question, "I read others' blogs more than I write in my own blog" earned the highest score ($M = 4.17$, $SD = 1.99$) of the reading construct in the UTAUT.

Table 5

Descriptive Statistics for the Reading Construct through Blogging Habits of Undergraduate Agricultural Leadership Students in 2012 (N = 70)

| Statements | <i>N</i> | <i>M</i> | <i>SD</i> |
|---|----------|----------|-----------|
| I read others' blogs more than I write in my own blog. | 70 | 4.17 | 1.99 |
| I mainly read blogs about entertainment, sports, politics or pop culture. | 70 | 3.73 | 1.98 |
| I read blogs more than once a month. | 70 | 3.36 | 2.01 |

Note. Overall $M = 4.24$, $SD = 1.88$. Scale: 7 = Strongly Agree, 6 = Moderately Agree, 5 = Somewhat Agree, 4 = Neutral (Neither Agree or Disagree), 3 = Somewhat Disagree, 2 = Moderately Disagree, 1 = Strongly Disagree.

The sixth objective of the study was to describe students' level of self-efficacy with blogging (see Table 6). Kurtosis and skewness of the data were not an outcome as the data were normally distributed. Therefore, the descriptive statistics of the UTAUT and self-efficacy were presented versus data frequencies. The question, "How much can you do with blogging to learn effectively?" earned the highest score ($M = 4.56$, $SD = 2.00$) of the self-efficacy construct in the UTAUT.

Table 6

Descriptive Statistics for the Self-Efficacy Construct through Blogging Habits of Undergraduate Agricultural Leadership Students in 2012 (N = 68)

| Statements | <i>N</i> | <i>M</i> | <i>SD</i> |
|---|----------|----------|-----------|
| How much can you do with blogging to learn effectively? | 68 | 4.56 | 2.00 |
| How much does blogging help you assist your peers with educational content? | 68 | 4.28 | 2.37 |
| How much does blogging help you to follow course objectives? | 68 | 4.18 | 2.50 |
| How much does blogging motivate you to learn educational content? | 68 | 3.91 | 2.28 |
| How much does blogging help you focus on educational content? | 68 | 3.91 | 2.48 |
| How much does blogging help you value learning? | 68 | 3.87 | 2.27 |
| How much does blogging get you to believe you can do well in school? | 68 | 3.85 | 2.37 |

Note. Overall *M* = 4.17, *SD* = 2.32. Scale: 9 = *A Great Deal*, 7 = *Quite a Bit*, 5 = *Some Influence*, 3 = *Very Little*, 1 = *Nothing*.

A significant relationship between self-efficacy and behavioral intention was found in the study (see Table 7). The value of *r* was found to be .53, which indicated a substantial relationship between the two constructs.

Table 7

The Relationship between Self-Efficacy and Behavioral Intention through Blogging Habits of Undergraduate Agricultural Leadership Students in 2012

| <i>Constructs</i> | <i>Behavioral Intention</i> | | |
|-------------------|-----------------------------|----------|----------|
| | <i>N</i> | <i>r</i> | <i>p</i> |
| Self-Efficacy | 70 | .53 | .00* |

Note. Magnitude: $.01 \geq r \geq .09$ = Negligible, $.10 \geq r \geq .29$ = Low, $.30 \geq r \geq .49$ = Moderate, $.50 \geq r \geq .69$ = Substantial, $r \geq .70$ = Very Strong (Davis, 1971).

**p* < .05.

The study assessed four demographics of the survey participants. Out of 68 respondents, 43 (63 percent) were male. Thirty-nine students (57 percent) had senior classification, 30 respondents (44 percent) had a GPA between 2.99 and 2.50, and 31 students (46 percent) were employed part-time. Demographics had no effect on any of the constructs. This could be due to the demographics of the sample being too similar, or due to demographics may not play a role in effecting blog use.

6. CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

These data were limited to the sample in the study and cannot be generalized beyond the sample. However, the data did provide insight on the usage of blogging among agricultural leadership students.

The data collected suggest that agricultural leadership students at Texas A&M generally feel that they would not have to put much effort into learning how to blog, as their effort expectancy in relation to blogging was low. The data indicated that students were typically low in their performance expectancy as to whether blogging could be used to improve educational outcomes. However, the literature consistently reports that blogging can be used to improve educational outcomes, and students who were exposed to blogging in the classroom reported a higher estimation of its usefulness; therefore, more awareness is needed to understand blogging's potential educational importance, and this is first accomplished through faculty education.

The students, on average, do not blog or believe they would begin blogging, but they did report that they enjoyed writing in general and more of them preferred to write informally, which is the writing style associated with blogging. While students responded that they generally read others' blogs more than they wrote in their own blog, they also, on average, responded that they read blogs less than once a month. As this was a self-report study, however, students could be reading blogs without realizing it, such as blogs on news and sports sites, or blogs that were not written by someone the student knows.

Students' level of self-efficacy with regard to blogging was low, indicating agricultural leadership students aren't currently interested in blogging or in utilizing blogging as part of their educational process. Bandura (1993) found low self-efficacy resulted in a tendency to avoid tasks perceived as new or difficult. The study found agricultural leadership students' low self-efficacy resulted in lowered behavioral intention to use blogging in an educational manner. Venkatesh et al. (2003) found effort expectancy is not well-formed until after experience with the technology. Since the survey respondents had low behavioral intention, and thus not much familiarity with blogging, effort expectancy was neutral.

Avci and Askar (2012) found that self-efficacy explained 71% of blog usage among students, along with perceived usefulness, and that these two were correlated. Yi and Hwang (2003) found that self-efficacy plays an important role in determining behavioral intention and actual usage, which is supported by the data from this study that found a correlation between self-efficacy and behavioral intention. The data also found that students reported not blogging as well as low self-efficacy and low behavioral intention.

The data supported Andergassen et al.'s (2009) reporting of students' negative perception of educational blogging. Lenhart et al. (2010) found that young adults are both blogging and commenting on blogs less than they were even a few years ago, which correlates with the data that suggests agricultural leadership students are both not blogging and not reading blogs. Rhoades et al. (2008) found that students are blogging minimally inside the classroom, which can also be concluded from the data based on the

fact that students reported not reading blogs more than once a month, and based on their attitude toward blogs in general.

The data suggest that agricultural leadership students' attitudes toward blogging stemmed from a lack of awareness of the benefits of blogging, and lack of familiarity with blogging. Recommendations for practice involve teachers and teaching assistants embracing blogging within the classroom, and experimenting with their use by students. This can be accomplished by increasing awareness among teachers about the benefits of blogging.

Blogging has an advantage over discussion forums, which are shared by many students, in that students feel personal ownership of the content of their blog, thus taking a greater interest in learning (Ferdig & Trammell, 2004). In this way, and in commenting on other blogs', students have a chance to legitimately participate, and hear from a number of diverse perspectives, both within and outside the classroom. Lastly, an individual blog typically has a narrow topic range, thus allowing students to become experts in one area in which they are interested, and in searching other blogs for material, allows them to learn about a variety of subjects (Ferdig & Trammell, 2004).

According to Ferdig and Trammell (2004) good practices for teachers who wish to implement blogging in the classroom include to begin blogging themselves, so as to familiarize themselves with the technology; to model blogging for students by providing background information about blogging, and set guidelines for proper use; and, to explain the public nature of blogs to students before they begin blogging.

Future research should examine agricultural leadership investigators' attitudes and intentions toward educational blogging through the use of UTAUT. Researchers should also assess the effects of mandatory blogging within an agricultural leadership classroom, and the effects it had on students' learning and peer interactions. The research gathered can be used to compare classrooms using educational blogging to classrooms where the process is not implemented. Undergraduate research is becoming more common and blogging offers many opportunities to study information that could aid teachers and students.

A qualitative study could be conducted to investigate in-depth agricultural leadership students' attitudes and perceptions toward the benefits of blogging, what their current interaction with blogging is and potential ways to increase or improve the use of blogging in the classroom. The study can also be modified and used for different samples and populations, specifically for students who have a more writing-intensive major, such as agricultural communications and journalism or English, to see within another sample how much the level and amount of writing affects attitudes toward blogging. A study with a pre- and post-test inquiring about students' blogging preferences could be useful in determining positive or negative effects of blogging in the classroom. The data gathered from future research can help inform educators of the benefits of educational blogging and how to increase its practice in agricultural leadership classrooms.

Future research should investigate students' actual use of blogging in the classroom, and verify their demographics, in contrast to this study's self-reported

demographics, where some students may have chosen not to report accurate information. This study found no effect from demographics on any of the constructs, so a larger sample with more diverse demographics could be investigated further in an attempt to discover potential demographic influence. The effect of GPA, in particular, on blogging use and which classes require blogging and which don't should be explored.

Researchers should expand upon the constructs of reading blogs and writing as it relates to blogging, in an effort to make those constructs more reliable. This study could be strengthened and re-administered in an effort to determine the relationship between blogging and writing, and the effects blogging has on improving writing skills, as well as encouraging practice outside of the classroom. This study found a relationship between self-efficacy and behavioral intention; however, other studies have been conducted that found a relationship between self-efficacy and effort expectancy. A study similar to this one could be conducted using self-efficacy as the independent variable instead of behavioral intention, in an effort to identify potential differences in the relationship between the constructs.

A study primarily focusing on the motivation behind blogging, or delving into the specific types of blogs interacted with most should be conducted. A study focusing more heavily on the demographics of the students would also be helpful in identifying potential blog users and non-users, or the demographics among students using different types of blogs.

Researchers should compare traditional online blogging acceptance among agricultural leadership students to the acceptance of newer forms of microblogging like

Twitter. Twitter reduces the journal-like nature of traditional blogging to 140 character statements and has a continually growing user base. Services like Twitter differ from the Traditional blog, creating a warehouse of smaller blogs in which users can only comment so much at a time. Twitter should be thought of in terms of its writers renting a small apartment to state their ideas and comment on others' ideas, rather than developing the full house approach of a traditional blog. Researchers should examine whether Twitter has affected student participation in traditional blogs and if it can be used effectively for educational purposes.

Future practice should reward teachers and teaching assistants utilizing blogging within the classroom and encouraging student use. Teacher training could be used to increase awareness among educators about the benefits of blogging. Educators must be able to convey the benefits of educational blogging in terms of its ease and benefit for student acceptance.

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